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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/091,682 | 03/05/2002 | Stacey Secatch | 10011021-1 | 7223 |

7590 03/02/2005

AGILENT TECHNOLOGIES, INC.
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EXAMINER

FAROOQ, MOHAMMAD O

ART UNIT

PAPER NUMBER

2182

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|-----------------|-----------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 10/091,682 | SECATCH, STACEY |
| Examiner | Art Unit | |
| Mohammad O. Farooq | 2182 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 16 December 2004.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-9 and 16-20 is/are rejected.
- 7) Claim(s) 10-15 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 05 March 2002 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-9 and 16-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeLano, U.S. 2003/0163763 A1.

2. As to claim 1, DeLano teaches a pushback FIFO (register file) having an input and an output, the pushback FIFO allowing data values that have been unloaded from the pushback FIFO to be reloaded into the pushback FIFO at the beginning of sequence of data values (by resetting the program counter) stored in the pushback FIFO if a determination is made that a data value should not have been unloaded (i.e. an error has occurred) from the pushback FIFO (page 1, paragraph 0006).

3. As to claim 2, DeLano teaches the pushback FIFO wherein said determination is made by logic external to the pushback FIFO (inherent) and provided to the pushback FIFO (item 110, Fig. 2).

4. As to claim 3, DeLano teaches the pushback FIFO, wherein if a determination is made that the data value unloaded from the pushback FIFO should have been unloaded, the unloaded data value is not reloaded into the pushback FIFO (i.e. the buffer is flushed; item 112, fig. 2).

5. As to claim 4, DeLano teaches the pushback FIFO, wherein if a determination is made that the data value unloaded from the pushback FIFO should have been unloaded, the unloaded data value is marked as an invalid FIFO data value (i.e. the buffer is flushed; item 112, fig. 2).

6. As to claim 5, DeLano teaches the pushback FIFO further comprising:
a standard FIFO having a plurality of storage locations for storing data values in a first-in-first-out fashion so that data values can be unloaded from the standard FIFO in a same sequence in which data values were loaded into the standard FIFO (item 12, fig. 1);

first logic, the first logic storing a copy of a data value unloaded from the standard FIFO (buffer logic; item 20, fig. 1); and

second logic, the second logic (i.e. read mux; item 16, fig. 1) outputting said data value unloaded from the standard FIFO and, if the data value output from the pushback FIFO should not have been output from the pushback FIFO, the second logic outputs the stored copy of the data value in a subsequent read cycle (see fig. 1).

7. As to claim 6, DeLano teaches the pushback FIFO wherein said determination is made by logic external to the pushback FIFO (inherent) and provided to the pushback FIFO (item 110, Fig. 2).

8. As to claim 7, DeLano teaches the pushback FIFO, wherein if a determination is made that the data value unloaded from the pushback FIFO should have been unloaded, the unloaded data value is not reloaded into the pushback FIFO (i.e. the buffer is flushed; item 112, fig. 2).

9. As to claim 8, DeLano teaches the pushback FIFO, wherein if a determination is made that the data value unloaded from the pushback FIFO should have been unloaded, the unloaded data value is marked as an invalid FIFO data value (i.e. the buffer is flushed; item 112, fig. 2).

10. As to claim 9, DeLano teaches pushback FIFO, wherein the first logic includes a first multiplexer having at least first and second inputs and an output, the first input being connected to an output of the standard FIFO, the multiplexer receiving at least one control signal, said at least one control signal controlling whether a data value unloaded from the standard FIFO is to be output from the output of the first multiplexer.

11. As to claim 16, DeLano teaches method of performing a FIFO pushback operation, the method comprising the steps of:

 unloading a first data value from a FIFO (page 1, paragraph 0006);

 determining whether or not the unloaded first data value should have been unloaded from the FIFO (see fig. 2);

 if a determination is made that the unloaded first data value should not have been unloaded from the FiFO (i.e. occurrence of data errors), reloading the first data value back into the FIFO such that the reloaded first value occupies a first position in a sequence of data values stored in the FIFO (page 1, paragraph 0006).

12. Claims 17-20 are method claims of apparatus claims 3-5 and 7. DeLano teaches apparatus as set forth in claims 3-5 and 7. Therefore, DeLano also teaches method as set forth in claims 17-20.

Allowable Subject Matter

13. Claims 10-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

14. The examiner disagrees with the applicant DeLano reference does not teach FIFO. The reference in page 2, paragraph 0016, line 7 states one read port and one write port to store data within buffer 20 and to write data from buffer 20 to register file 12. This complete cycle can be considered as a function of FIFO as well known in the art and in applicant's remarks. Furthermore, in paragraph 0018, line 10; and in paragraph 0019, line 3; the reference teaches prior data from a particular register is read before storing new data. If one considers this concept for a register without the rest of the registers in the register file in item 12, fig. 1; one would agree this is the functionality of a FIFO where old data (first in data) is outputted first before new data is entered into a certain register.

15. Finally, the examiner would like to provide evidence reference DeLano teach FIFO. The registers (item 12, fig. 1) such as disclosed in DeLano is well known to one of ordinary skill in the art as (FIFO) registers associated with FIFO. The examiner would like to point to the well known in the art references' titles and abstracts of newly disclosed references Proch et al. and Ternes et al. respectively disclose "...FIFO buffer register..." and "...FIFO register...". These references teach registers associated with FIFO. Therefore, the examiner retains the rejection of claims 1-9 and 16-20.

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16. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

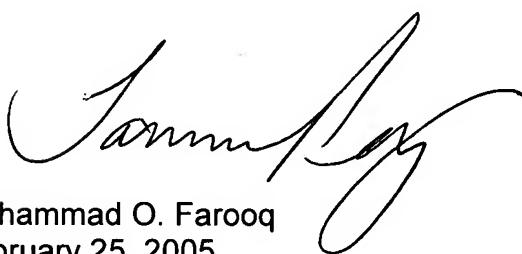
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mohammad O. Farooq whose telephone number is (571) 272-4144. The examiner can normally be reached on 9:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin can be reached on (571) 272-4146. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mohammad O. Farooq
February 25, 2005